

September 2003

ECONOMIC AND REVENUE FORECAST

FISCAL YEAR 2004 1st Quarter

WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

September 2003 ECONOMIC AND REVENUE FORECAST

FISCAL YEAR 2004 1ST QUARTER

prepared by:
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September 2003

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Accurate reproduction of information in this forecast is welcomed.
Acknowledgment of the source would be appreciated.

ACKNOWLEDGMENTS

The quarterly revenue forecast is a collaborative effort. It is the product of information provided by private individuals and organizations, and DNR staff. Without their contributions this forecast could not be completed.

An absolutely critical component of this forecasting work are the purchasers of DNR timber. These busy individuals and companies willingly provide information that is essential to the process of estimating harvest volumes.

Many DNR staff also contribute to the forecast. Those persons who provide data or forecasts of revenue flows for their areas of responsibility make an especially significant contribution, and I especially thank Jon Tweedale and Paul Penhallegon in this regard. Also, other DNR staff have provided valuable and constructive feedback on drafts of this forecast report, including Phil Aust, Dave Larsen, Peggy Murphy, Jim Smego, Bob van Schoorl.

I am grateful to Billie-Lynn Wyckoff for help and initiative in conducting the purchaser survey efficiently and effectively.

Bruce P. Glass
October 10, 2003

PREFACE

This forecast projects revenues from Washington state trust lands managed by the Department of Natural Resources. These monies are distributed to accounts associated with specific management activities and the trust lands from which revenues are expected to be generated. The department revises its forecast quarterly to provide updated information for trust beneficiaries as well as for long-term budgeting purposes.

This forecast covers fiscal years ending June 2004 (FY 2004) through June 2007 (FY 2007). The baseline date for this September 2003 forecast is June 30, 2003, the end of FY 2003. While sales and revenue data are current as of this date, the forecasts are based on the most up-to-date data available at the time of their estimation (i.e., after the baseline date). Macroeconomic and market outlook data are the most up to date available at the time the forecast was written.

Unless otherwise indicated, values are expressed in nominal terms, without adjustment for inflation. Interpretations of trends in the forecast therefore require care in separating inflationary changes in the value of money over time from changes attributable to other economic influences.

FORECAST CALENDAR

The forecast calendar for future DNR Economic and Revenue forecasts is shown in the table below. The DNR forecasts provide information that is used in the state-wide Washington Economic and Revenue Forecasts carried out by the Office of the Forecast Council. The timing for the DNR forecast is therefore determined by the schedule of the state-wide forecast, prescribed by RCW 82.33.020. The calendar prescribed by RCW 82.33.020 is reflected in the release date, i.e., when preliminary revenue forecast estimates will be available. Publication of the actual forecast document follows at a later date.

Forecast title	Baseline date	Release date	Publication date (approx.)
November 2003	End Q1, FY 2004	November 20, 2003	November 28, 2003
February 2004	End Q2, FY 2004	February 20, 2004	February 27, 2004
June 2004	End Q3, FY 2004	June 18, 2004	June 25, 2004
September 2004	End Q4, FY 2004	September 17, 2004	September 24, 2004

MAJOR POINTS OF THE SEPTEMBER 2003 FORECAST

■ US Macroeconomic Conditions & Trends

- Recent economic indicators suggest the US economy is on a recovery track, prompted by highly expansionary fiscal and monetary policy.
- On the fiscal policy side, government defense expenditures have increased markedly. Also, tax cuts are expected to boost disposable income and help support consumer expenditure over the next 12 months or so.
- On the monetary policy side, the Federal Reserve Bank (FRB) target for the rate at which banks borrow money from each other (the federal funds rate) now stands at a 40-year low of 1.00%, following a 0.25% reduction in June 2003. The FRB is expected to hold this rate steady as economic recovery takes firm hold, but may reduce it further if the economy falters.
- A key concern for the US economy is whether the anticipated recovery will be sustainable in the face of the following pressures:
 1. Rising interest rates: Expectations of economic recovery are feeding through into increases in intermediate and long-term interest rates. Increasing federal government borrowing to finance an expanding budget deficit is likely to add further upward pressure to interest rates, particularly if the deficits persist. What effects will rising interest rates have on investment, and will already high (consumer) debt loads be supportable? Will recovering economic growth be sufficient to offset these and other factors?

2. Low operating rates: Overcapacity and increasingly unrestricted international trade flows suggest the domestic economy could still face a lengthy adjustment period, as resources are reallocated economy-wide. In particular, employment growth is expected to lag, and has potential to adversely effect consumption expenditures through reduced income growth.
 3. Large trade and current account deficits are resulting in depreciation of the US dollar. This depreciation is expected to provide a mild--and necessary--inflationary boost for the economy. However, exports are not expected to be very responsive to this currency depreciation.
- The August 2003 Blue Chip consensus estimate of real gross domestic product (GDP) growth for calendar year (CY) 2003 has held steady at about 2.3%, little changed since March 2003. The August 2003 consensus estimate of real GDP growth for CY 2004 stands at 3.7%, above the trend rate of about 3.5%, and little changed since January 2003.

■ Japanese Macroeconomic Conditions & Trends

- The August 2003 Blue Chip consensus anticipates real GDP growth in 2003 will be positive in both CY 2003 (0.9%) and CY 2004 (1.1%), largely on the back of anticipated export-led economic growth.
- However, Japan continues to experience deflationary pressures, reflected in August 2003 Consensus estimates of inflation at the consumer price level, i.e., -0.6% and -0.4% for CY 2003 and CY 2004 respectively (following -0.7% in CY 2001 and -0.9% in CY 2002).

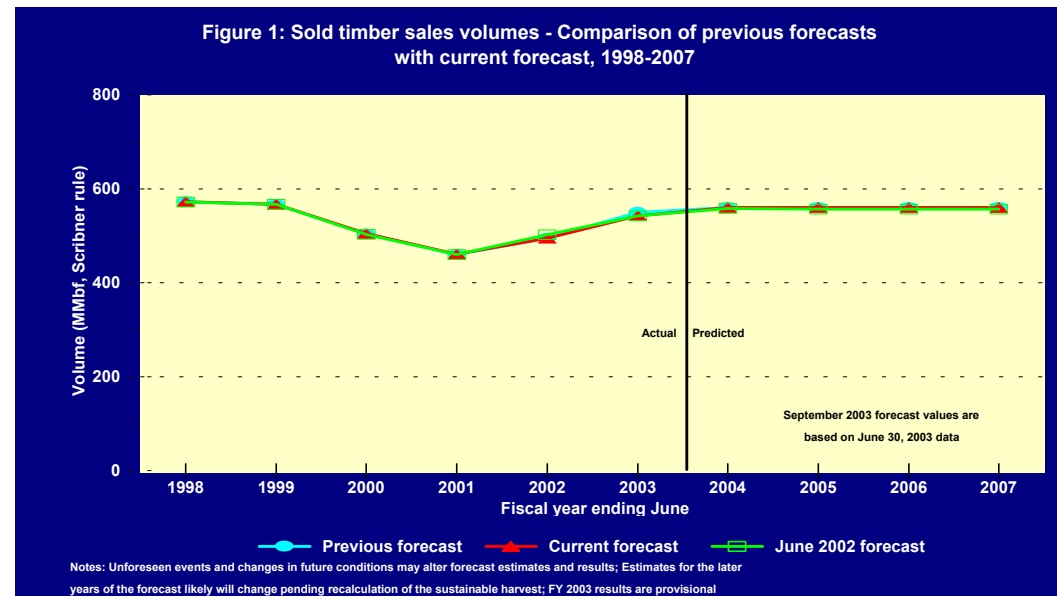
■ Implications of Macroeconomic Conditions for Forecast

- Continued interest rate increases risk reducing the affordability of housing, particularly if income growth lags in recovery. Also, an end to the mortgage refinancing boom likely will diminish the key role that housing has played over the last 3 years or so, as a pillar supporting both consumer spending (low interest rates have encouraged mortgage refinancing) and the US economy.
- US housing is sensitive to interest rate movements, and so is not expected to be dramatically--or even positively--responsive to the fledgling economic recovery. For this forecast, housing starts are expected to decline from the CY 2002 high of 1.70 million to reach a low of about 1.59 million in CY 2005 (seasonally adjusted rates), perhaps following a late CY 2003 burst of activity encouraged by a desire to beat prospective interest rate increases. However, forecast starts are still expected to remain relatively high by historical standards.
- US repair and remodelling expenditures are also expected to remain at relatively high levels compared with prior years, rising somewhat as housing starts slow.
- Japanese housing starts are expected to decline from about 1.15 million/year in CY 2002 to less than 1.10 million per year in CY 2006, potentially reflecting reduced (export) demand for US wood products.
- Long-term changes in trade flows for raw materials and finished products are likely as manufacturing capacity for wood products and their substitutes moves out of Japan (and the USA) to other countries. In particular, the

importance of the People's Republic of China as both a market and regional processing center is expected to increase, the more so given increased construction activity in advance of the 2008 Olympic Games (to be staged in Beijing).

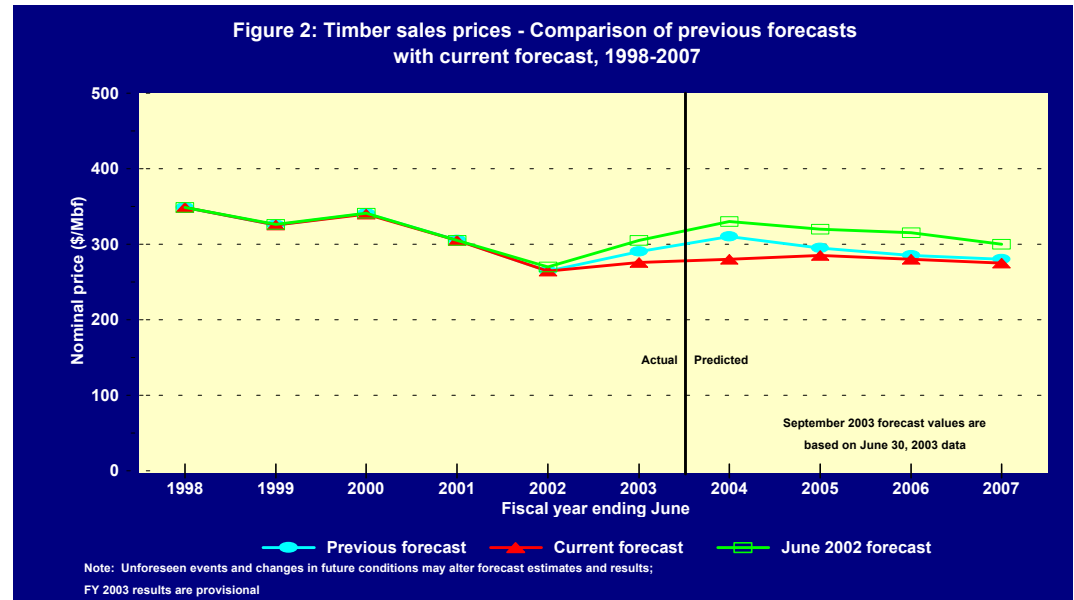
■ Sold Timber Sale Volumes: Compared with the June 2003 forecast, sold target timber sale volumes are unchanged (Figure 1, Table 1).

- Sold timber volume for FY 2003 was 543 MMbf, about 7 MMbf less than the target sold volume for FY 2003, and some 10% above the FY 2002 level.
- Sales volume estimates for the later years of the forecast likely will change following recalculation of the sustainable harvest. The Board of Natural Resources is presently slated to consider adoption of the recalculated sustainable harvest during spring of CY 2004.



- **Timber Sale Prices:** Compared with the June 2003 forecast, estimated timber prices are reduced by between about 2% and 10% over the forecast period (Figure 2, Table 1).

- As a generic indicator of current market conditions, softwood lumber prices have declined from \$345/Mbf in March 2002 to a low of \$271/Mbf in November 2002 (Random Lengths framing lumber composite price index). Since then prices have languished about the \$280/Mbf level, although they have picked up since June 2003 and presently exceed \$300/Mbf. This recent price increase likely reflects seasonal factors (e.g., inventory restocking, fires limiting harvesting activity), rather than market fundamentals.



- Near-term outlook for DNR timber sales prices:

Seasonal changes aside, look for flat stumpages. Depending on the extent to which benefits are captured in bid premiums, depreciation of the US dollar relative to the Canadian dollar, the Yen, the Euro, and certain other currencies, may support timber sales prices, making US imports of softwood logs and lumber relatively more expensive compared with domestic-sourced product. The US dollar depreciation appears to be 'the straw breaking the camel's back' with respect to restricting the flow of Canadian softwood lumber imports into the USA, something that imposition of tariffs and duties alone struggled to achieve. Salvage of fire-damaged trees and stand treatment to reduce fire hazard may dampen any such upward price pressure however.

- Long-term outlook for DNR timber sales prices:

At best, real (i.e., inflation-adjusted) softwood stumpages are likely to remain fairly constant over the forecast period,

assuming estimates of future North American softwood timber harvest volume remain unchanged.

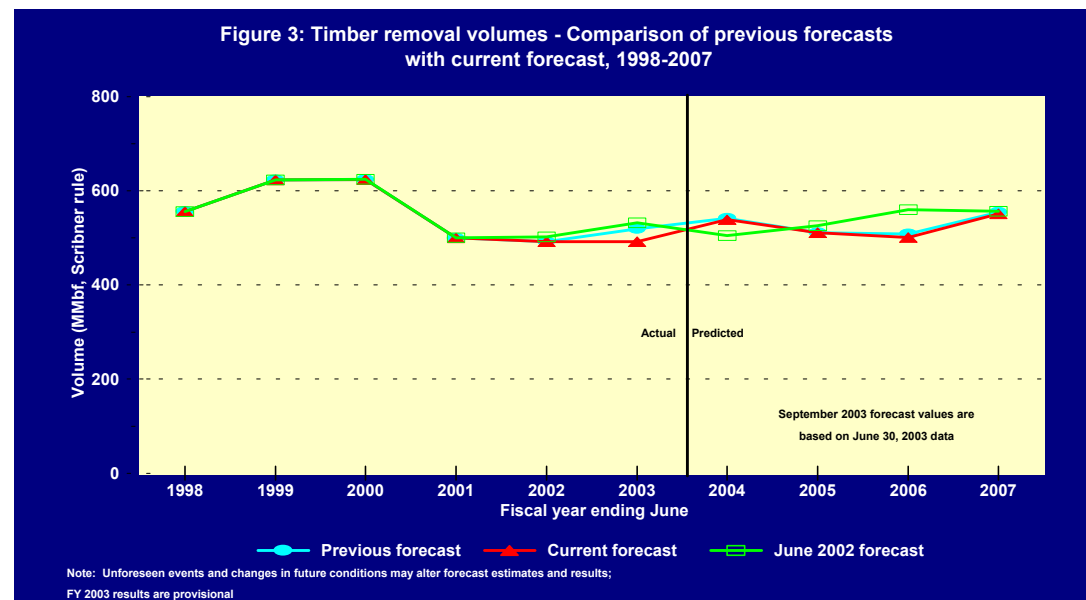
- Factors contributing to the outlook for forecast timber sales prices include:
 1. Overcapacity in the western North American softwood sawmilling industry, much of which is marginal in character, i.e., capacity that moves in and out of production in response to price, tending to make softwood lumber market price rallies short-lived;
 2. Historically high levels of softwood log imports from Canada into the western USA, tending to dilute purchaser interest in sales offered by the department (thereby depressing prices);
 3. Increasing softwood lumber imports from countries other than Canada, and especially from plantation sources;

4. Increasing competition in export markets--particularly in Japan--for both softwood logs and lumber, increasing the supply of these products in the domestic (US) market;
5. Increasing substitution of both (non-solid) wood and non-wood products for solid wood products, especially in engineering end use applications.
6. A trend towards increased utilization and availability of small-diameter logs, particularly from private lands; and
7. Reduced price premia for the large-diameter logs that typically make up a large proportion of DNR timber sales.

■ **Timber Removal Volumes:** Compared with the June 2003 forecast, estimated timber removal volumes are virtually unchanged (Figure 3, Table 1).

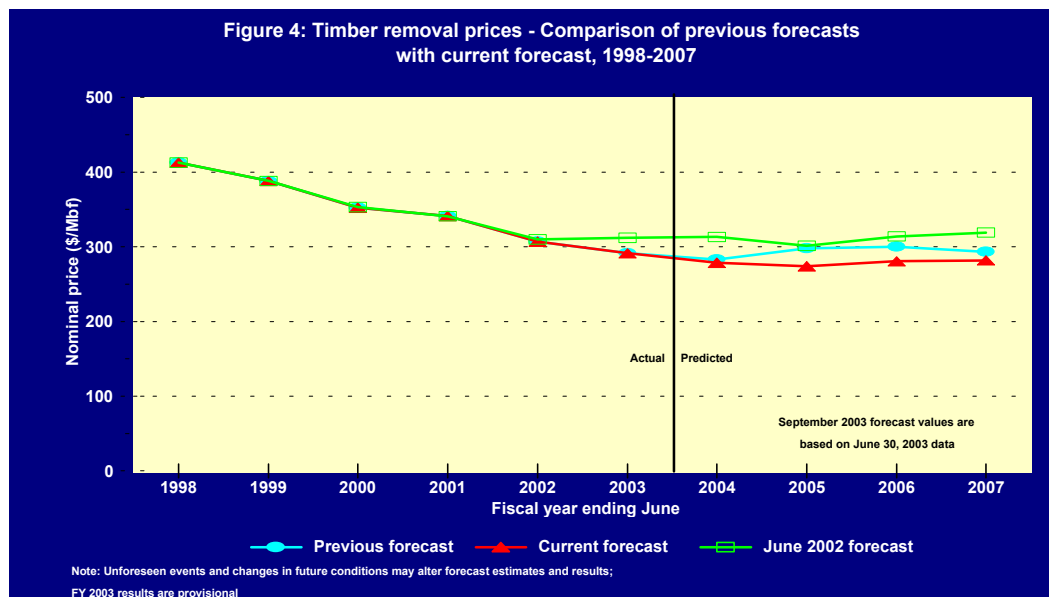
- Timber removals in FY 2003 were 492 MMbf, unchanged from FY 2002, but about 5% less than previously forecast.
- The trend in removals assumes the department will meet its sold timber volume targets for each year in the forecast period.
- Timber removal volumes have not responded as strongly as might be implied by the present high level of housing starts. Increased use of substitute products--especially imported softwood lumber and logs--have tended to displace demand for sawtimber that might otherwise have been drawn from DNR-managed lands.
- Timber removal volumes are expected to lag increased sales volume, as purchasers place part of the increased sales volume into increased inventory.

- **Uncut Timber Inventory Under Contract:** Compared with the June 2003 forecast, uncut timber under contract at the end of FY 2007 is some 32 MMbf higher in volume terms, and over \$3 million higher in value terms (Table 1), largely reflecting lower than anticipated removal volumes for FY 2003 and responses to changes in forecast timber sales prices.
- At the end of FY 2007, uncut inventory under contract is estimated to be 919 MMbf, worth \$252 million (average of \$274/MMbf), compared with 781 MMbf, worth \$207 million (average of \$272/MMbf) at the end of the June 2003 quarter (Table 1).



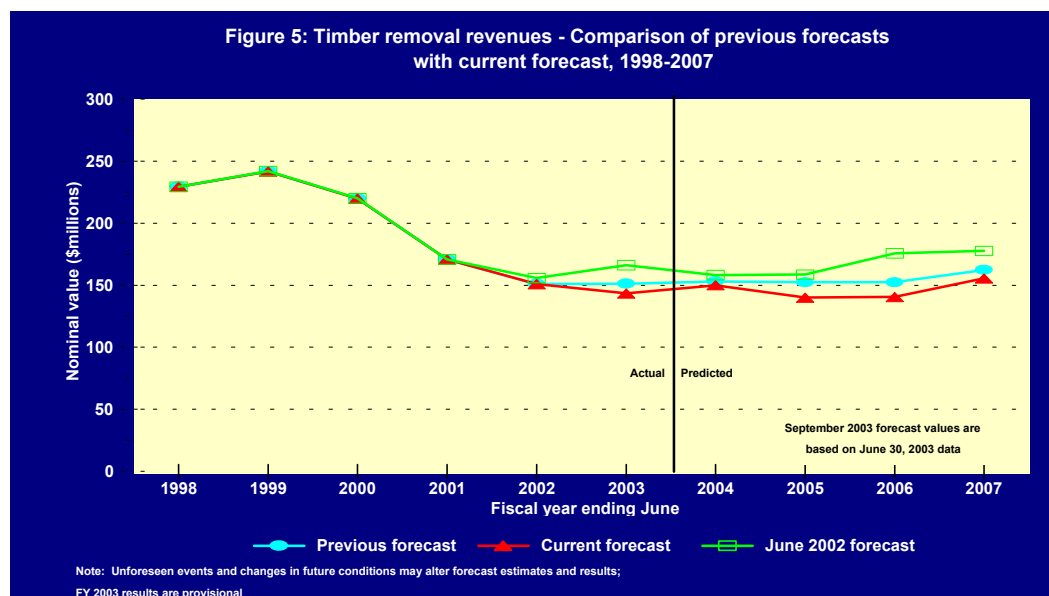
- **Timber Removal Prices:** Compared with the June 2003 forecast, timber removal prices are 2% to 8% lower over the forecast period (Figure 4, Table 1), largely reflecting the changed estimates of timber sales prices.

- The removals price for FY 2003 was \$291/Mbf, about 5% lower than in FY 2002.
- Removals prices for FY 2004-2007 are estimated to average about \$278/Mbf.



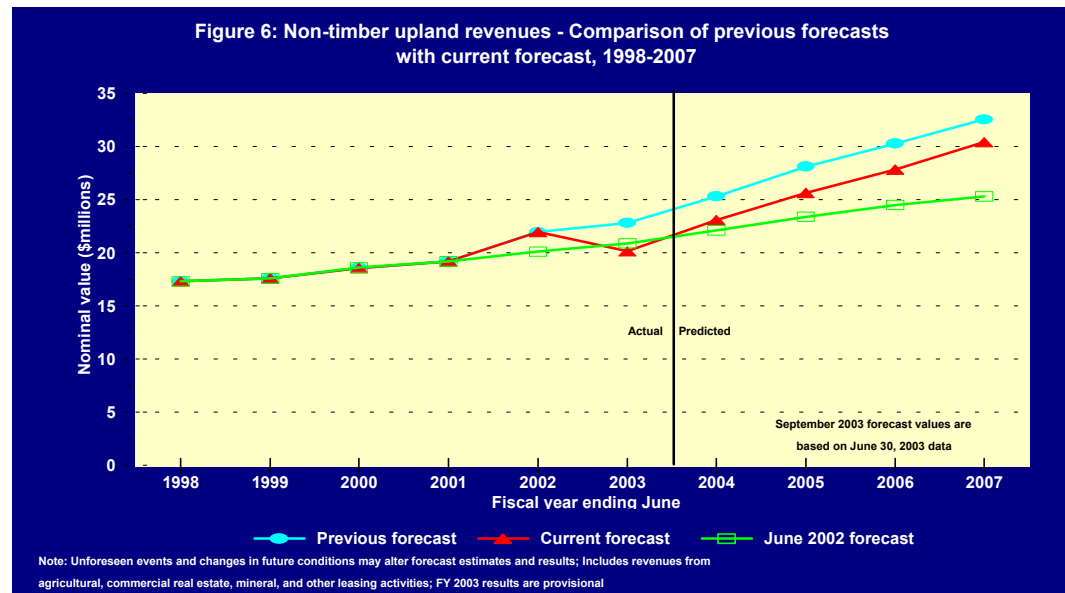
- **Timber Removal Revenues:** Compared with the June 2003 forecast, timber removal revenues are forecast to be about \$4 million (2%) lower in FY 2004, about \$12 million (8%) lower FY 2005 and FY 2006, and some \$7 million (4%) lower in FY 2007 (Figure 5, Tables 1 & 2).

- Timber removals revenues for FY 2003 were \$143 million, about 5% lower than in FY 2002, and about \$8 million (5%) less than the previous forecast.
- Changes in estimated timber removal revenues largely reflect the effects of revised forecasts of timber sale prices (except for FY 2003 which reflects reduced removal volumes).



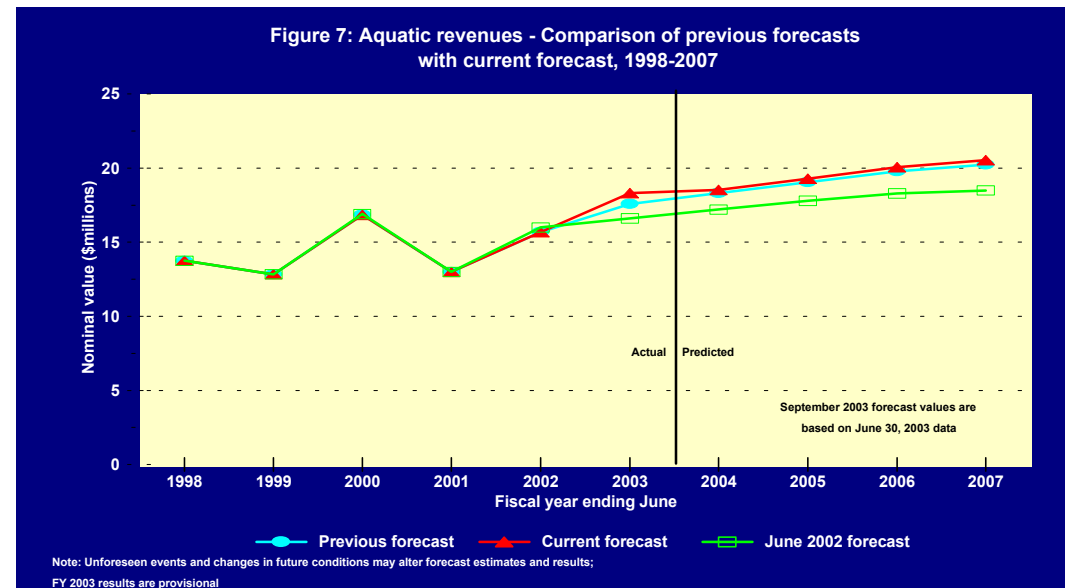
■ **Non-timber Upland Revenues:** Compared with the June 2003 forecast, estimates of non-timber upland revenues are \$2.2 million to \$2.5 million less than previously estimated (Figure 6, Table 2).

- Non-timber upland revenues for FY 2003 were \$20 million, about 8% lower than in FY 2002.
- Changes in revenue estimates reflect effects of delayed achievement of projected performance targets.



■ **Aquatic Revenues:** Compared with the June 2003 forecast, aquatic revenues are estimated to be about 1% (\$0.2 million to \$0.3 million) higher than previous estimates (Figure 7, Table 2).

- Aquatic revenues for FY 2003 totaled over \$18 million, nearly 17% higher than in FY 2002.
- Changes in estimated revenues reflect effects of including an additional three months' worth of data in re-estimating underlying forecast models.
- The Severe Acute Respiratory Syndrome (SARS) epidemic in East Asia has played itself out at least for this year, and impacts on geoduck demand--and therefore harvest--

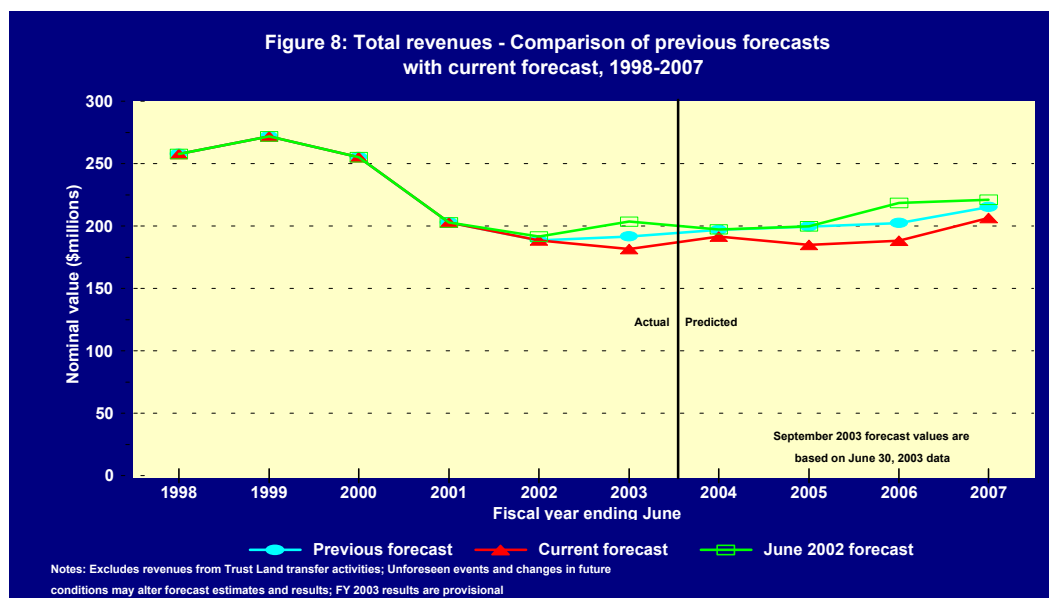


have abated. Revenue impacts for FY 2003 appear to have been minimal, but SARS may yet be a factor affecting geoduck demand over the next and subsequent fiscal years.

- Forecast aquatic revenues assume future revenues will follow trends exhibited by past revenue receipts, and do not explicitly take into account factors with potentially major revenue impacts (e.g., revisions to geoduck harvest levels, and biological factors such as green crab infestation and paralytic shellfish poisoning).

■ **Total Revenues:** Compared with the June 2003 forecast, total revenues are forecast to be \$6 million to \$15 million (3% to 7%) lower over the forecast period (Figure 8, Table 2). These changes in total revenues reflect underlying changes in forecasts of timber sales prices and non-timber revenue estimates.

- Actual revenues for FY 2003 totaled about \$182 million, compared with over \$188 million in FY 2002, and an estimated \$10 million less than previously forecast.
- For this September 2003 forecast, total revenues are forecast to increase to nearly \$191 million in FY 2004 from over \$182 million in FY 2003 (excluding Trust Land Transfers). Total revenues are then forecast to decrease to \$185 million in FY 2005, before increasing through FY 2006 to reach over \$206 million in FY 2007.
- Revenues to trust beneficiaries from the resource transfer component of Trust Land Transfers are not included in the revenue estimates reported above. These revenues are expected to reach about \$42.4 million during FY 2004 and



FY 2005, i.e., \$21.2 million in FY 2004 and \$21.2 million in FY 2005 (Footnote 1, Table A2).

- Beneficiary and management revenues follow the same trend as total revenues (Tables A2 and A3).

■ Some Uncertainty Caveats:

- Target sold timber sale volumes for the later years of the forecast likely will change as a result of the recalculation of the sustainable harvest for DNR-managed trust lands.
- Over time and as appropriate, operational changes being undertaken in the department's timber sales programs will be factored into the forecast. These changes include streamlining the timber sales process, and changes in the prospective quality of the timber sales product mix.
- Operational changes being undertaken in the department's nontimber product sales and leasing programs are also expected to influence future revenue returns from land management activities. These changes are factored into this forecast (e.g., increasing emphasis on commercial real estate leases).
- Market impacts of changes in timber supply from outside the Pacific Northwest region are expected to contribute to increasingly competitive--and volatile--domestic and foreign lumber and sawtimber markets, e.g., foreign log and lumber supplies, substitutes for solid wood products. These impacts may be tempered (or exacerbated) by exchange rate movements.
- The strength and duration of the emerging upturn in the US economy: Just how durable and robust will the upturn currently underway in the US economy prove, once the effects of the one-time stimulatory factors prompting recovery (e.g., low interest rates, tax cuts, high federal government spending) fade or are not otherwise sustained?

Table 1a: Projected trust land timber sales, removals and revenues

Fiscal year		Actual 2001	Actual 2002	Actual FY 2003 7/1/2002 to 6/30/2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
Sold timber sales								
	Volume (mmbf)	461	495	543	560	560	560	560
	Price (\$/mbf)	\$305	\$264	\$276	\$280	\$285	\$280	\$275
Ending uncut inventory under contract								
	Volume (mmbf)	737	731	761	803	852	910	919
	Value (\$millions)	\$227.8	\$205.6	\$206.9	\$217.3	\$237.1	\$253.4	\$252.0
	Price (\$/mbf)	\$309	\$281	\$272	\$271	\$278	\$278	\$274
Timber removals								
	Volume (mmbf)	500	492	492	539	511	501	551
	Price (\$/mbf)	\$341	\$307	\$291	\$277	\$273	\$280	\$282
Timber removal revenue (\$millions)		\$170.6	\$150.9	\$143.3	\$149.2	\$139.8	\$140.5	\$155.4

Note: Totals may not add due to rounding

Table 1b: Change from previous forecast

Fiscal year		2001	2002	Change since last quarter	2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
Sold timber sales									
	Volume (mmbf)	0	0	173	(7)	0	0	0	0
	Price (\$/mbf)	(\$0)	\$0	(\$12)	(\$14)	(\$30)	(\$10)	(\$5)	(\$5)
Ending uncut inventory under contract									
	Volume (mmbf)	0	0	35	19	23	23	29	32
	Value (\$millions)	\$0.0	\$0.0	\$3.1	(\$4.2)	(\$17.0)	(\$10.0)	(\$0.9)	\$3.3
	Price (\$/mbf)	(\$0)	(\$0)	(\$9)	(\$12)	(\$30)	(\$20)	(\$10)	(\$6)
Timber removals									
	Volume (mmbf)	0	0	131	(27)	(3)	0	(7)	(3)
	Price (\$/mbf)	\$0	\$0	\$1	(\$0)	(\$6)	(\$25)	(\$20)	(\$11)
Timber removal revenue (\$millions)		\$0.0	\$0.0	\$38.4	(\$8.0)	(\$4.0)	(\$12.6)	(\$11.8)	(\$7.1)

Note: Totals may not add due to rounding

Table 2a: Projected trust land revenue by source (\$millions)

Fiscal year	Actual 2001	Actual 2002	Actual FY 2003 7/1/2002 to 6/30/2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
Timber removal revenue	\$170.6	\$150.9	\$143.3	\$149.2	\$139.8	\$140.5	\$155.4
Agricultural and mineral revenue	\$13.5	\$14.1	\$13.1	\$13.6	\$14.7	\$15.3	\$16.4
Commercial real estate revenue	\$5.7	\$7.5	\$6.8	\$9.5	\$11.0	\$12.5	\$14.0
Aquatic revenue	\$13.0	\$15.7	\$18.3	\$18.5	\$19.3	\$20.0	\$20.5
Trust land transfer (resource value)	\$31.9	\$8.6	\$31.4	\$20.0	\$22.4	\$0.0	\$0.0
Total revenue, excluding trust land transfer	\$202.8	\$188.1	\$182.3	\$190.8	\$184.7	\$188.4	\$206.3

Note: Totals may not add due to rounding

Table 2b: Change from previous forecast (\$millions)

Fiscal year	2001	2002	Change since last quarter	2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
Timber removal revenue	\$0.0	\$0.0	\$38.4	(\$8.0)	(\$4.0)	(\$12.6)	(\$11.8)	(\$7.1)
Agricultural and mineral revenue	\$0.0	(\$0.3)	\$3.1	(\$1.4)	(\$2.2)	(\$2.5)	(\$2.5)	(\$2.2)
Commercial real estate revenue	\$0.0	\$0.0	\$1.0	(\$1.2)	\$0.0	\$0.0	\$0.0	\$0.0
Aquatic revenue	\$0.0	(\$0.0)	\$3.2	\$0.7	\$0.2	\$0.3	\$0.3	\$0.3
Trust land transfer (resource value)	\$0.0	\$0.0	\$19.2	\$0.0	\$20.0	\$22.4	\$0.0	\$0.0
Total revenue, excluding trust land transfer	\$0.0	\$0.0	\$45.9	(\$10.2)	(\$6.0)	(\$14.8)	(\$14.0)	(\$8.9)

Note: Totals may not add due to rounding

Table A1: Projected trust revenues by fund and fiscal year, June 2003 forecast, 2000-2007 (\$millions)

Fiscal year	2000	2001	2002	Actual 2003 to 03/31/03	Projected 2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEMENT ACCOUNTS									
041 RMCA - UPLAND	\$30.9	\$24.9	\$22.2	\$14.3	\$21.4	\$23.4	\$24.3	\$25.7	\$27.6
041 RMCA - AQUATIC	\$7.2	\$5.4	\$6.4	\$6.5	\$7.4	\$7.7	\$8.0	\$8.3	\$8.5
014 FDA	\$26.4	\$20.5	\$19.8	\$15.1	\$20.7	\$19.9	\$19.1	\$18.3	\$19.1
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	\$64.4	\$50.7	\$48.4	\$35.8	\$49.5	\$51.0	\$51.4	\$52.3	\$55.3
CURRENT FUNDS									
113 COMMON SCHOOL CONSTRUCTION	\$66.0	\$52.2	\$44.1	\$30.6	\$44.9	\$49.2	\$52.1	\$55.6	\$60.3
999 FOREST BOARD COUNTIES	\$81.0	\$64.0	\$58.5	\$44.4	\$60.5	\$56.7	\$58.4	\$55.8	\$59.1
001 GENERAL FUND	\$5.2	\$3.8	\$4.3	\$2.5	\$3.9	\$5.4	\$3.2	\$2.9	\$2.7
349 UNIVERSITY BOND RETIREMENT	\$0.3	\$1.1	\$0.5	\$0.7	\$1.1	\$0.6	\$0.8	\$0.9	\$1.0
347 WSU BOND REPAYMENT	\$0.5	\$0.7	\$0.8	\$0.5	\$0.9	\$0.9	\$1.0	\$1.0	\$1.1
042 CCP&RI	\$5.1	\$3.8	\$3.9	\$3.6	\$5.0	\$6.1	\$4.0	\$3.8	\$3.9
036 CAPITOL BUILDING CONSTRUCTION	\$9.2	\$6.5	\$7.6	\$4.1	\$5.5	\$6.3	\$6.4	\$6.7	\$7.2
061/3/56 NORMAL (CWU, CWU, WWU, TESC) SCHOOL	\$0.1	\$0.1	\$0.1	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
OTHER FUNDS	\$0.0	\$0.1	\$0.2	\$0.0	\$0.1	\$0.1	\$0.2	\$0.2	\$0.1
	-----	-----	-----	-----	-----	-----	-----	-----	-----
	\$166.4	\$132.3	\$120.0	\$96.6	\$122.0	\$124.5	\$126.0	\$127.0	\$135.5
AQUATIC LANDS ENHANCEMENT ACCOUNT									
02R AQUATIC LANDS	\$9.7	\$7.6	\$9.3	\$8.6	\$10.2	\$10.6	\$11.1	\$11.5	\$11.8
PERMANENT FUNDS									
601 AGRICULTURAL COLLEGE	\$2.6	\$1.8	\$1.1	\$2.0	\$2.9	\$2.4	\$2.3	\$2.4	\$3.2
604 NORMAL SCHOOL PERMANENT	\$5.5	\$4.3	\$4.0	\$1.5	\$2.3	\$3.8	\$2.9	\$2.8	\$2.7
605 COMMON SCHOOL PERMANENT	\$1.0	\$0.8	\$0.9	\$0.2	\$0.7	\$0.9	\$1.1	\$1.2	\$1.2
606 SCIENTIFIC PERMANENT	\$4.7	\$4.7	\$4.3	\$1.5	\$3.7	\$3.1	\$4.4	\$4.9	\$5.3
607 UNIVERSITY PERMANENT	\$1.0	\$0.6	\$0.7	\$0.3	\$0.5	\$0.6	\$0.4	\$0.3	\$0.2
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	\$14.7	\$12.2	\$10.9	\$5.4	\$10.0	\$10.7	\$11.1	\$11.6	\$12.7
TOTAL TO TRUST BENEFICIARY FUNDS	\$190.8	\$152.1	\$140.2	\$100.6	\$142.2	\$145.8	\$149.2	\$150.1	\$160.0
TOTAL ALL FUNDS	\$255.3	\$202.8	\$188.6	\$136.4	\$191.6	\$196.8	\$199.6	\$202.4	\$215.3

Notes:

- 1- Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01, \$40.0 million in FY 2002-03 (provisional), and \$2.4 million (estimate) in FY 2004-05, payable to the Common School Construction Fund.
- 2- Upland RMCA does not include land bank transactions.
- 3- Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits, fees, etc. are not included.
- 4- Totals may not add due to rounding.
- 5- Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.
- 6- Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

Table A2: Projected trust revenues by fund and fiscal year, September 2003 forecast, 2000-2007 (\$millions)

Fiscal year	2000	2001	2002	Actual 2003 to 06/30/03	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEMENT ACCOUNTS								
041 RMCA - UPLAND	\$30.9	\$24.8	\$22.1	\$19.5	\$22.3	\$22.8	\$23.9	\$26.6
041 RMCA - AQUATIC	\$7.2	\$5.4	\$6.4	\$7.8	\$7.7	\$8.0	\$8.4	\$8.6
014 FDA	\$26.4	\$20.5	\$19.8	\$20.2	\$18.9	\$17.3	\$16.7	\$17.8
	-----	-----	-----	-----	-----	-----	-----	-----
	\$64.4	\$50.7	\$48.3	\$47.4	\$49.0	\$48.1	\$49.0	\$53.0
CURRENT FUNDS								
113 COMMON SCHOOL CONSTRUCTION	\$66.0	\$52.3	\$44.1	\$41.2	\$48.1	\$48.5	\$51.7	\$58.2
999 FOREST BOARD COUNTIES	\$81.0	\$64.0	\$58.5	\$58.8	\$57.7	\$51.1	\$50.2	\$55.0
001 GENERAL FUND	\$5.2	\$3.8	\$4.3	\$3.9	\$3.8	\$3.5	\$2.9	\$2.6
348 UNIVERSITY BOND RETIREMENT	\$0.3	\$1.1	\$0.5	\$0.8	\$0.7	\$0.8	\$0.9	\$0.9
347 WSU BOND REPAYMENT	\$0.5	\$0.7	\$0.8	\$0.6	\$0.8	\$0.9	\$0.9	\$1.0
042 CCP&RI	\$5.1	\$3.9	\$3.9	\$4.5	\$5.5	\$4.2	\$3.4	\$3.5
036 CAPITOL BUILDING CONSTRUCTION	\$8.2	\$6.5	\$7.6	\$5.2	\$4.8	\$6.4	\$6.8	\$7.5
061/3/5/6 NORMAL (CWU, CWU, WWU, TCSC) SCHOOL	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
OTHER FUNDS	\$0.0	\$0.1	\$0.2	\$0.0	\$0.1	\$0.2	\$0.2	\$0.1
	-----	-----	-----	-----	-----	-----	-----	-----
	\$166.4	\$132.5	\$120.0	\$115.1	\$121.5	\$115.6	\$117.1	\$129.1
AQUATIC LANDS ENHANCEMENT ACCOUNT								
02R AQUATIC LANDS	\$9.7	\$7.6	\$9.3	\$10.6	\$10.8	\$11.2	\$11.7	\$12.0
PERMANENT FUNDS								
601 AGRICULTURAL COLLEGE	\$2.6	\$1.8	\$1.0	\$3.0	\$2.2	\$1.9	\$2.3	\$3.4
604 NORMAL SCHOOL PERMANENT	\$5.5	\$4.3	\$4.0	\$2.5	\$2.6	\$2.8	\$2.9	\$2.9
605 COMMON SCHOOL PERMANENT	\$1.0	\$0.6	\$0.7	\$0.4	\$0.4	\$0.5	\$0.6	\$0.7
606 SCIENTIFIC PERMANENT	\$4.7	\$4.7	\$4.3	\$3.1	\$3.6	\$4.2	\$4.5	\$5.1
607 UNIVERSITY PERMANENT	\$1.0	\$0.6	\$0.7	\$0.3	\$0.6	\$0.4	\$0.3	\$0.2
	-----	-----	-----	-----	-----	-----	-----	-----
	\$14.7	\$12.0	\$10.7	\$9.3	\$9.5	\$9.8	\$10.6	\$12.3
TOTAL TO TRUST BENEFICIARY FUNDS								
	\$190.8	\$152.1	\$139.9	\$134.9	\$141.8	\$136.6	\$139.4	\$153.3
TOTAL ALL FUNDS								
	\$255.3	\$202.8	\$188.3	\$182.3	\$190.8	\$184.7	\$188.4	\$206.3

Notes:

- 1- Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01, \$40.0 million in FY 2002-03 (provisional), and \$2.4 million (estimate) in FY 2004-05, payable to the Common School Construction Fund.
- 2- Upland RMCA does not include land bank transactions.
- 3- Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits, fees, etc. are not included.
- 4- Totals may not add due to rounding.
- 5- Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.
- 6- Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

Table A3: Change from June 2003 to September 2003 forecast-Projected trust revenues by fund and fiscal year, 2000-2007 (\$millions)

Fiscal year	2000	2001	2002	2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEMENT ACCOUNTS								
041 RMCA - UPLAND	\$0.0	(\$0.0)	(\$0.1)	(\$2.1)	(\$1.1)	(\$1.5)	(\$1.8)	(\$1.0)
041 RMCA - AQUATIC	\$0.0	\$0.0	\$0.0	\$0.4	\$0.1	\$0.1	\$0.1	\$0.1
014 FDA	\$0.0	(\$0.0)	\$0.0	(\$0.5)	(\$1.0)	(\$1.8)	(\$1.7)	(\$1.3)
	-----	-----	-----	-----	-----	-----	-----	-----
	\$0.0	(\$0.0)	(\$0.1)	(\$2.2)	(\$2.0)	(\$3.2)	(\$3.3)	(\$2.2)
CURRENT FUNDS								
113 COMMON SCHOOL CONSTRUCTION	\$0.0	\$0.0	\$0.1	(\$4.1)	(\$0.2)	(\$3.6)	(\$3.9)	(\$2.0)
999 FOREST BOARD COUNTIES	\$0.0	(\$0.0)	(\$0.0)	(\$2.0)	\$1.0	(\$7.3)	(\$5.6)	(\$4.0)
001 GENERAL FUND	\$0.0	\$0.0	\$0.0	\$0.1	(\$1.6)	\$0.3	\$0.0	(\$0.1)
348 UNIVERSITY BOND RETIREMENT	\$0.0	\$0.0	\$0.0	(\$0.3)	\$0.2	\$0.0	\$0.0	(\$0.1)
347 WSU BOND REPAYMENT	\$0.0	\$0.0	\$0.0	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)
042 CEP&RI	\$0.0	\$0.2	(\$0.1)	(\$0.5)	(\$0.6)	\$0.3	(\$0.5)	(\$0.4)
036 CAPITOL BUILDING CONSTRUCTION	\$0.0	(\$0.0)	(\$0.0)	(\$0.3)	(\$1.5)	(\$0.0)	\$0.1	\$0.3
061/3/5/6 NORMAL (CWU, EWU, WWU, TESC) SCHOOL	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)
OTHER FUNDS	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	(\$0.0)
	-----	-----	-----	-----	-----	-----	-----	-----
	\$0.0	\$0.2	(\$0.0)	(\$7.3)	(\$3.0)	(\$10.5)	(\$9.9)	(\$6.5)
AQUATIC LANDS ENHANCEMENT ACCOUNT								
02R AQUATIC LANDS	\$0.0	\$0.0	(\$0.0)	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2
PERMANENT FUNDS								
601 AGRICULTURAL COLLEGE	\$0.0	(\$0.0)	(\$0.0)	\$0.1	(\$0.2)	(\$0.3)	(\$0.0)	\$0.2
604 NORMAL SCHOOL PERMANENT	\$0.0	\$0.0	\$0.0	\$0.3	(\$1.1)	(\$0.1)	\$0.1	\$0.2
605 COMMON SCHOOL PERMANENT	\$0.0	(\$0.2)	(\$0.2)	(\$0.1)	(\$0.4)	(\$0.6)	(\$0.6)	(\$0.5)
606 SCIENTIFIC PERMANENT	\$0.0	(\$0.0)	\$0.0	(\$0.8)	\$0.5	(\$0.3)	(\$0.4)	(\$0.2)
607 UNIVERSITY PERMANENT	\$0.0	(\$0.0)	(\$0.0)	(\$0.1)	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)
	-----	-----	-----	-----	-----	-----	-----	-----
	\$0.0	(\$0.2)	(\$0.2)	(\$0.7)	(\$1.2)	(\$1.3)	(\$0.9)	(\$0.4)
TOTAL TO TRUST BENEFICIARY FUNDS	\$0.0	\$0.0	(\$0.2)	(\$7.7)	(\$4.0)	(\$11.6)	(\$10.7)	(\$6.7)
TOTAL ALL FUNDS	\$0.0	\$0.0	(\$0.3)	(\$9.9)	(\$6.0)	(\$14.8)	(\$14.0)	(\$8.9)

Notes:

- 1 - Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01, \$40.0 million in FY 2002-03 (provisional), and 42.4 million (estimate) in FY 2004-05, payable to the Common School Construction Fund.
- 2 - Upland RMCA does not include land bank transactions.
- 3 - Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits, fees, etc. are not included.
- 4 - Totals may not add due to rounding.
- 5 - Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.
- 6 - Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

Table A4: Change from June 2003 to September 2003 forecast-Projected trust revenues by fund and fiscal year, 2000-2007 (%)

Fiscal year	2000	2001	2002	2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEMENT ACCOUNTS								
041 RMCA - UPLAND	0.0%	-0.0%	-0.4%	-9.7%	-4.7%	-6.1%	-6.9%	-3.6%
041 RMCA - AQUATIC	0.0%	0.0%	0.0%	5.4%	0.8%	0.9%	1.0%	1.1%
014 FDA	0.0%	-0.0%	0.1%	-2.5%	-4.9%	-9.7%	-9.1%	-6.9%
	-----	-----	-----	-----	-----	-----	-----	-----
	0.0%	-0.0%	-0.1%	-4.5%	-4.0%	-6.3%	-6.4%	-4.0%
CURRENT FUNDS								
113 COMMON SCHOOL CONSTRUCTION	0.0%	0.1%	0.1%	-9.2%	-0.4%	-6.8%	-7.0%	-3.4%
999 FOREST BOARD COUNTIES	0.0%	-0.0%	-0.0%	-3.3%	1.7%	-12.5%	-10.0%	-6.8%
001 GENERAL FUND	0.0%	0.0%	0.2%	3.3%	-30.2%	9.3%	0.2%	-2.6%
348 UNIVERSITY BOND RETIREMENT	0.0%	1.1%	3.2%	-29.7%	30.3%	0.6%	2.4%	-11.6%
347 WSU BOND REPAYMENT	0.0%	1.1%	1.7%	-10.8%	-11.2%	-10.6%	-9.8%	-9.1%
042 CCP&RI	0.0%	4.4%	-2.1%	-10.4%	-10.4%	6.3%	-11.9%	-9.2%
036 CAPITOL BUILDING CONSTRUCTION	0.0%	-0.0%	-0.0%	-6.2%	-24.2%	-0.3%	1.2%	3.5%
061/3/5/6 NORMAL (CWU, CWU, WWU, TCSC) SCHOOL	0.0%	-1.1%	-1.8%	-19.9%	-21.0%	-24.3%	-25.4%	-26.2%
OTHER FUNDS	0.0%	-5.3%	-8.4%	-27.2%	-16.4%	-4.8%	8.6%	-6.0%
	-----	-----	-----	-----	-----	-----	-----	-----
	0.0%	0.2%	-0.0%	-6.0%	-2.4%	-8.3%	-7.8%	-4.8%
AQUATIC LANDS ENHANCEMENT ACCOUNT								
02R AQUATIC LANDS	0.0%	0.0%	-0.2%	3.4%	1.5%	1.6%	1.7%	1.8%
PERMANENT FUNDS								
601 AGRICULTURAL COLLEGE	0.0%	-0.1%	-1.3%	4.2%	-7.7%	-14.7%	-1.3%	5.5%
604 NORMAL SCHOOL PERMANENT	0.0%	0.0%	0.0%	11.2%	-30.1%	-3.0%	3.5%	7.2%
605 COMMON SCHOOL PERMANENT	0.0%	-24.5%	-21.7%	-18.5%	-48.0%	-53.5%	-51.2%	-43.7%
606 SCIENTIFIC PERMANENT	0.0%	-0.0%	0.2%	-22.3%	15.9%	-6.1%	-8.3%	-4.1%
607 UNIVERSITY PERMANENT	0.0%	-0.2%	-0.7%	-29.9%	6.8%	-4.5%	-1.2%	-12.0%
	-----	-----	-----	-----	-----	-----	-----	-----
	0.0%	-1.6%	-1.9%	-7.2%	-11.2%	-11.6%	-8.2%	-3.3%
TOTAL TO TRUST BENEFICIARY FUNDS	0.0%	0.0%	-0.2%	-5.4%	-2.8%	-7.8%	-7.1%	-4.2%
TOTAL ALL FUNDS	0.0%	0.0%	-0.2%	-5.2%	-3.1%	-7.4%	-6.9%	-4.1%

Notes:

- 1- Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01, \$40.0 million in FY 2002-03 (provisional), and \$2.4 million (estimate) in FY 2004-05, payable to the Common School Construction Fund.
- 2- Upland RMCA does not include land bank transactions.
- 3- Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits, fees, etc. are not included.
- 4- Totals may not add due to rounding.
- 5- Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.
- 6- Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

Table A.5: Revenue projections by fund and biennium, September 2003 forecast, 1995-2007 (\$millions)

Fiscal years	1995-97	1997-99	1999-2001	Biennium to 06/30/03	Projected 2003-2005	Projected 2005-2007
MANAGEMENT ACCOUNTS						
041 RMCA - UPLAND	\$79.9	\$65.4	\$55.7	\$41.6	\$45.1	\$50.6
041 RMCA - AQUATIC	\$10.0	\$11.3	\$12.5	\$14.1	\$15.8	\$16.9
014 FDA	\$74.2	\$56.9	\$46.9	\$40.0	\$36.2	\$34.5
	-----	-----	-----	-----	-----	-----
	\$164.1	\$133.6	\$115.1	\$95.7	\$97.1	\$102.0
CURRENT FUNDS						
113 COMMON SCHOOL CONSTRUCTION	\$166.4	\$133.6	\$118.3	\$85.3	\$96.6	\$110.0
999 FOREST BOARD COUNTIES	\$195.1	\$172.9	\$145.0	\$117.2	\$108.8	\$105.3
001 GENERAL FUND	\$14.4	\$11.7	\$9.1	\$8.2	\$7.2	\$5.5
348 UNIVERSITY BOND RETIREMENT	\$4.3	\$3.3	\$1.4	\$1.3	\$1.5	\$1.8
347 WSU BOND REPAYMENT	\$0.9	\$1.1	\$1.2	\$1.5	\$1.7	\$1.9
042 CCP&RI	\$17.3	\$10.4	\$9.0	\$8.3	\$9.8	\$6.9
036 CAPITOL BUILDING CONSTRUCTION	\$11.5	\$13.8	\$14.7	\$12.8	\$11.1	\$14.3
061/3/56 NORMAL (CWU, CWU, WWU, TCSC) SCHOOL	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
OTHER FUNDS	\$0.1	\$0.2	\$0.1	\$0.3	\$0.3	\$0.3
	-----	-----	-----	-----	-----	-----
	\$410.2	\$347.2	\$298.9	\$235.1	\$237.1	\$246.2
AQUATIC LANDS ENHANCEMENT ACCOUNT						
02R AQUATIC LANDS	\$14.2	\$15.3	\$17.3	\$19.9	\$22.0	\$23.7
PERMANENT FUNDS						
601 AGRICULTURAL COLLEGE	\$9.6	\$7.0	\$4.4	\$4.0	\$4.1	\$5.7
604 NORMAL SCHOOL PERMANENT	\$7.5	\$7.1	\$9.8	\$6.5	\$5.5	\$5.9
605 COMMON SCHOOL PERMANENT	\$1.8	\$1.8	\$1.6	\$1.1	\$0.9	\$1.3
606 SCIENTIFIC PERMANENT	\$15.0	\$14.8	\$9.3	\$7.3	\$7.8	\$9.6
607 UNIVERSITY PERMANENT	\$4.8	\$2.9	\$1.6	\$1.0	\$1.0	\$0.5
	-----	-----	-----	-----	-----	-----
	\$38.7	\$33.6	\$26.7	\$20.0	\$19.3	\$22.9
TOTAL TO TRUST BENEFICIARY FUNDS						
	\$463.1	\$396.1	\$342.9	\$274.9	\$278.4	\$292.7
TOTAL ALL FUNDS						
	\$627.1	\$529.7	\$458.1	\$370.6	\$375.5	\$394.7

Notes:

- 1- Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01, \$40.0 million in FY 2002-03 (provisional), and \$2.4 million (estimate) in FY 2004-05, payable to the Common School Construction Fund.
- 2- Upland RMCA does not include land bank transactions.
- 3- Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits, fees, etc. are not included.
- 4- Totals may not add due to rounding.
- 5- Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.
- 6- Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

APPENDIX

FORECAST PERFORMANCE: COMPARISON OF ACTUALS WITH FORECAST ESTIMATES

The end of a fiscal year is a convenient time to assess forecast performance. Such periodic assessments are useful for building forecast confidence. They also aid in interpreting the forecast estimates, and applying those estimates in policy, planning, and operational settings.

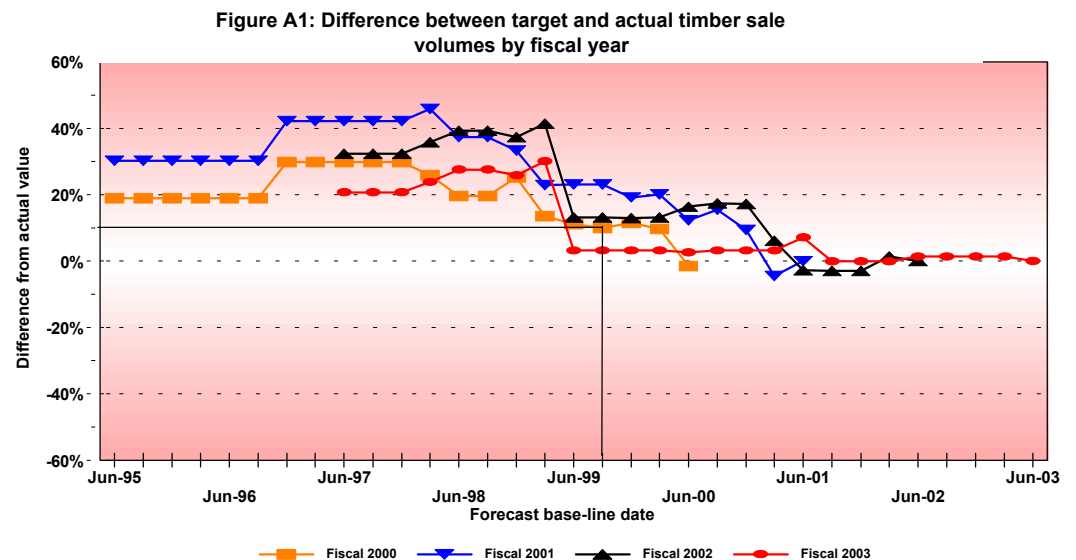
The following brief bullet points outline major inferences that can be drawn from the accompanying suite of charts. These charts compare the difference between various forecast estimates and actual values (expressed as a percentage difference) for selected forecast measures, and how these differences have changed over time from forecast to forecast.

Inferring forecast performance from these charts requires exercise of considerable caution. It is extremely tempting to take the

following charts at face value, and assert a forecast was on or off the target at a certain time. However, this perspective overlooks the use of the forecast. The forecast paints a picture of the future at a given time, and that picture may or may not be realized for reasons both within and beyond departmental influence and control. One purpose of a forecast, though, is to prompt policy and/or managerial response, and an irony of forecasting is that responses resulting from a forecast may be deliberately directed at ensuring the forecast is not actually realized in practice.

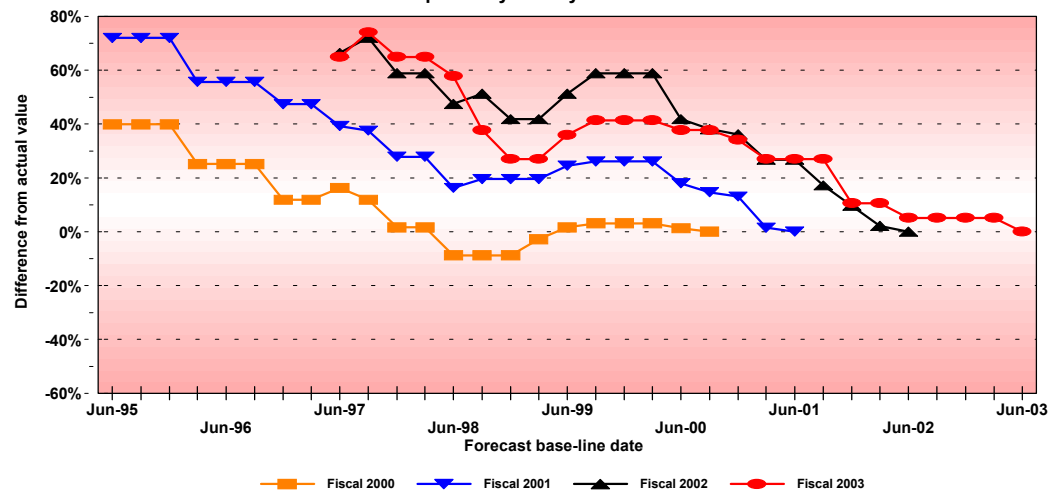
Using the thin black lines in Figure A1 as guides, the charts may be interpreted as follows. For the forecast based on September 1999 base-line data, i.e., the November 1999 forecast, the target timber sale volume was 10% higher than was actually realized.

- *Timber sale volumes (Figure A1):*
Past tendency for target sales volume to be greater than realized volume changed for FY 03.



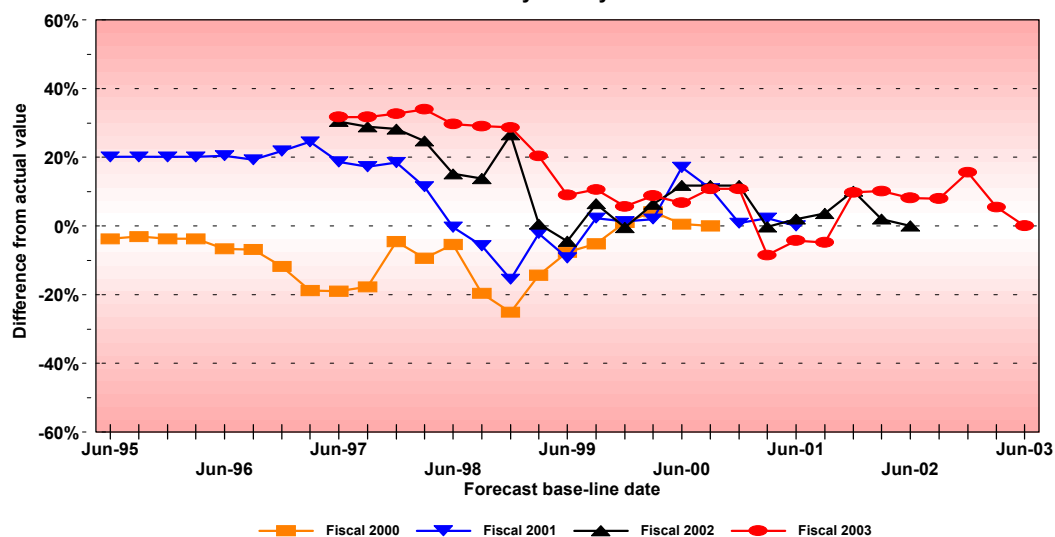
- Timber sales prices (Figure A2):*
Pronounced tendency toward overestimation for the last three fiscal years, although more recent estimates for FY 03 have not tended toward overestimation as much.

Figure A2: Difference between forecast and actual timber sale prices by fiscal year



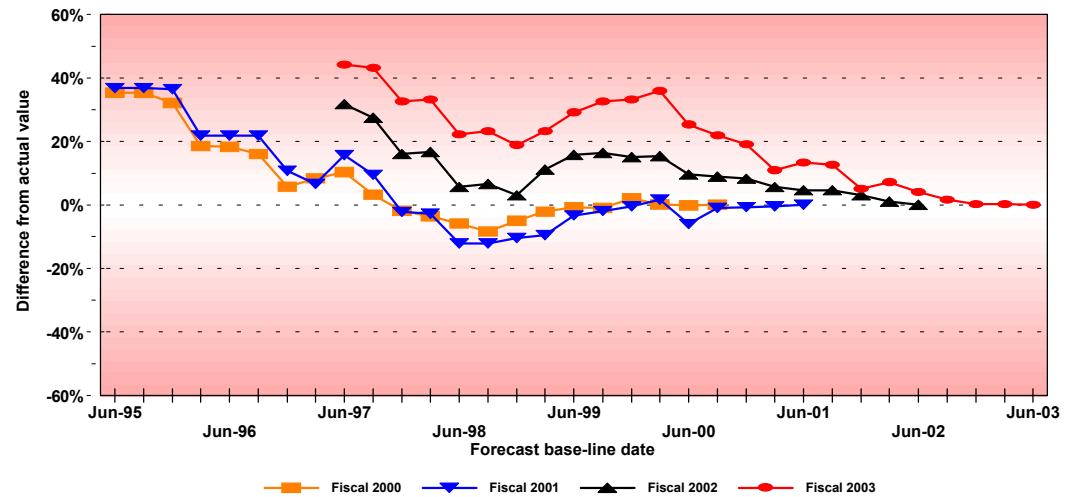
- Timber removal volumes (Figure A3):*
Historical tendency toward underestimation (resulting from an overly conservative removal rate assumption, i.e., removals assumed to occur in the last year of the contract) has changed in more recent forecasts. These more recent forecasts exhibit greater precision and less directional bias, i.e., estimation variability tends to diminish as realized outcome date is approached. Occasional unusually large fluctuation in forecast estimate apparent as realization date approaches.

Figure A3: Difference between forecast and actual timber removal volumes by fiscal year



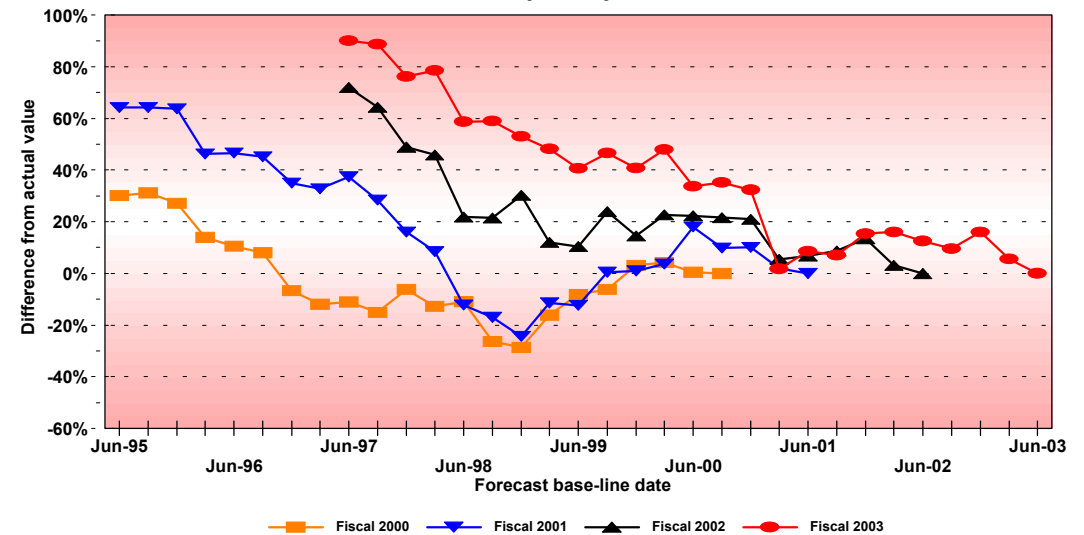
- Timber removal prices (Figure A4):*
 Historical tendency toward overestimation, largely resulting from the tendency to overestimate timber sales prices.

Figure A4: Difference between forecast and actual timber removal prices by fiscal year



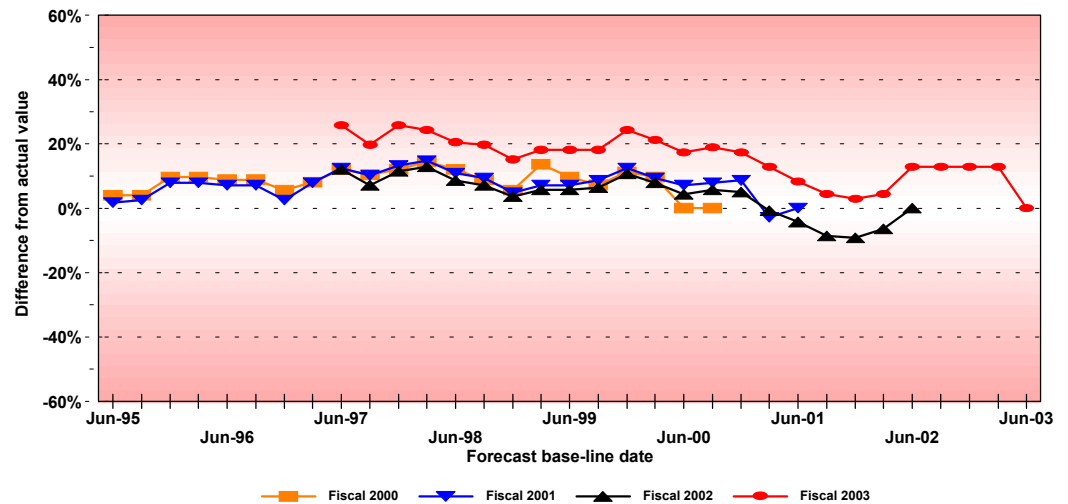
- Timber removal revenues (Figure A5):*
 Historical tendency toward underestimation (resulting from conservative removal rate assumption, i.e., removals are assumed to occur in the last year of the contract) has been reversed, and more recent forecasts (FY 02 and FY 03) have tended to overestimate timber removal revenues.

Figure A5: Difference between forecast and actual timber removal revenues by fiscal year



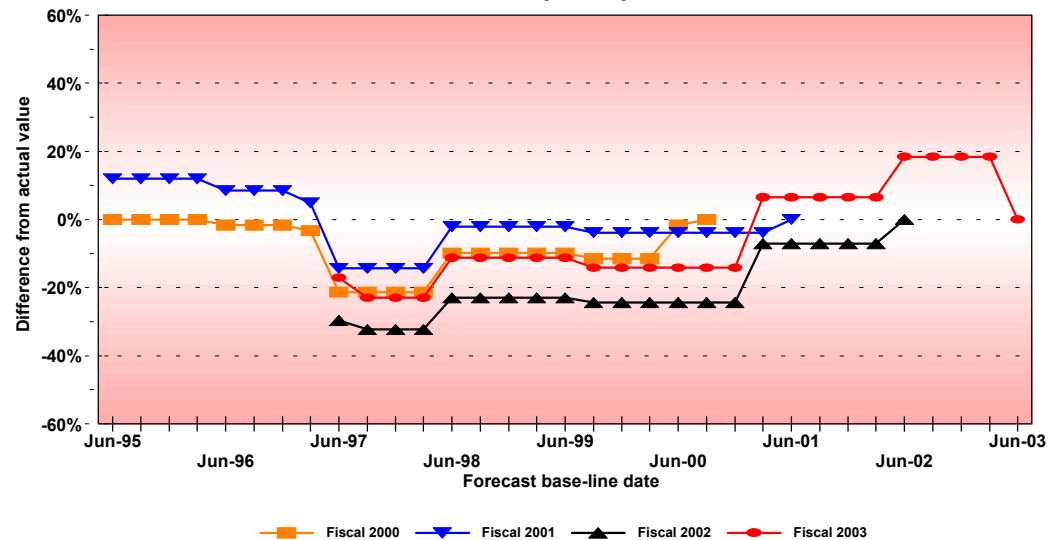
- Agriculture & mineral revenues (Figure A6):* FY 03 forecast estimates tend to be higher than actually realized, probably due to setting high performance targets for the most recent forecasts. Otherwise, estimates show relatively little variation about the actual values consistent with most revenue streams having little market exposure.

Figure A6: Difference between forecast and actual agricultural and mineral lease revenues by fiscal year



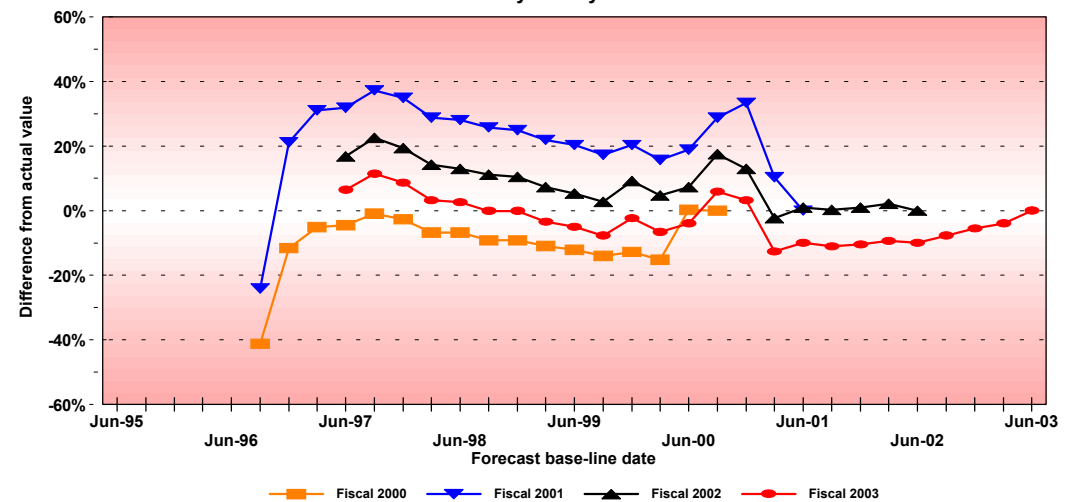
- Commercial real estate revenues (Figure A7):* Historical tendency toward underestimation, but for FY 03 the tendency in recent forecasts has been toward overestimation, again probably due to setting high performance targets.

Figure A7: Difference between forecast and actual commercial real estate lease revenues by fiscal year



- Aquatic revenues (Figure A8):* Recent tendency toward over rather than underestimation has been reversed for FY 2003. No forecast estimates available prior to September 1996, i.e., November 1996 forecast.

Figure A8: Difference between forecast and actual aquatic revenues by fiscal year



- Total revenues (Figure A9):* Most recent forecasts (FY 01 through FY 03) have tended to overestimate revenues.

Figure A9: Difference between forecast and actual total revenues by fiscal year

